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### MAILING CERTIFICATE

Applicant hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first-class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

Oct. 18 2004  
Date

by Kay Bulen  
Signature

Kay Bulen  
Printed Name

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Klaus Früh

Serial No.: 10/624,727

Filed: July 21, 2003

For: DOWNREGULATION OF CELL SURFACE GLYCOPROTEINS BY A FAMILY OF HUMAN UBIQUITIN LIGASES

Art Unit: 1632

Examiner:

Docket No.: 49321-89

Date: October 18, 2003

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

### INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to the requirements in 37 C.F.R. § 1.56, and in conformance with 37 C.F.R. 1.97 and 1.98, Applicants hereby submit an Information Disclosure Statement. Applicants respectfully request that the Examiner: (1) consider the following documents during the course of his or her examination of the above-identified patent application, and (2) list the following documents in the References Cited section of any patent that may issue from the above-identified patent application.

The following documents are provided:

Other

Nicholas, J. et al., *J. Virol.* 71:1963-1974, 1997

Coscoy, L., and D. Ganem, *Proc. Natl. Acad. Sci. USA* 97:8051-8056, 2000

Ishido S., et al., *J. Virol.* 74:5300-5309, 2000b

Coscoy, L. et al., *J. Cell. Biol.* 155:1265-1974, 2001a

Boname, J.M. and P. G. Stevenson, *Immunity* 15:627-636, 2001

Coscoy and Ganem, *J. Clin. Invest.* 107:1599-1606, 2001b

Guerin, J. L. et al., *J. Virol.* 76:2912-2923, 2002

Früh et al., *Virus Research* 88:55-69, 2002

McFadden, G. and P.M. Murphy, *Curr. Opin. Microbiol.* 3:371-378, 2000

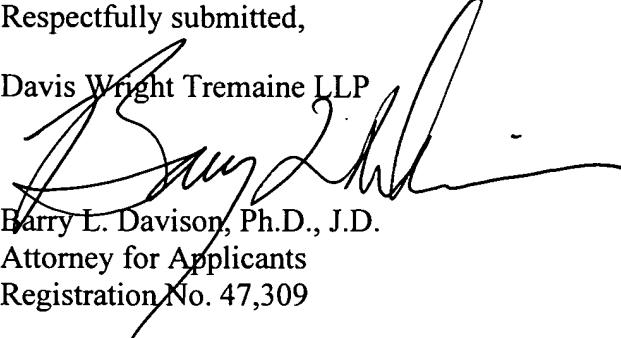
Applicants cite nine references listed on the attached substitute for form PTO-1449. The order of these references should not be construed to suggest their relative pertinence. The Examiner is encouraged to review the entire disclosure of each reference in order to draw his or her own conclusions concerning the pertinence of the references to the claimed subject matter of this application. The filing of this Information Disclosure Statement should not be construed to suggest that a patentability search has been made or that the cited references are prior art or are considered to be material to patentability.

Applicants respectfully request consideration of the foregoing documents during examination of the above-identified patent application. Applicants have enclosed a completed Information Disclosure Statement by Applicant and copies of the cited documents.

No fee is believed due. If any fee is deemed due, the Commissioner is authorized to charge Deposit Account 04-0258 of Davis Wright Tremaine LLP. A copy of this document is enclosed.

Respectfully submitted,

Davis Wright Tremaine LLP

  
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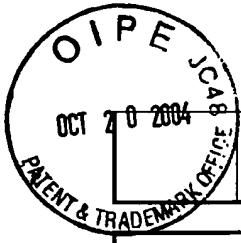
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|--|---|----|---|------------------------|---------------|
| Substitute for form 1449/PTO   |   |    |   | Complete if Known      |               |
| <b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br><br><i>(Use as many sheets as necessary)</i> |   |    |   | Application Number     | 10/624,727    |
|  |   |    |   | Filing Date            | July 21, 2003 |
|  |   |    |   | First Named Inventor   | Früh          |
|  |   |    |   | Art Unit               | 1632          |
|  |   |    |   | Examiner Name          |               |
| Sheet  | 2 | of | 3 | Attorney Docket Number | 49321-89      |

| NON PATENT LITERATURE DOCUMENTS |                       |   |                |
|---------------------------------|-----------------------|---|----------------|
| Examiner Initials*              | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.             | T <sup>2</sup> |
|                                 | O1                    | NICHOLAS et al., "A Single 13-Kilobase Divergent Locus in the Kaposi Sarcoma-Associated Herpesvirus (Human Herpesvirus 8) Genome Contains Nine Open Reading Frames That Are Homologous to or Related to Cellular Proteins," <i>J. Virol.</i> 71(3):1963-1974, 1997          |                |
|                                 | O2                    | COSCOY and GANEM, "Kaposi's Sarcoma-Associated Herpesvirus Encodes Two Proteins That Block Cell Surface Display of MHC Class I Chains by Enhancing Their Endocytosis," <i>Proc. Natl. Acad. Sci.</i> 97(14):8051-8056, 2000   |                |
|                                 | O3                    | ISHIDO et al., "Downregulation of Major Histocompatibility Complex Class I Molecules by Kaposi's Sarcoma-Associated Herpesvirus K3 and K5 Proteins," <i>J. Virol.</i> 74(11):5300-5309, 2000  |                |
|                                 | O4                    | COSCOY et al., "A novel class of herpesvirus-encoded membrane-bound E3 ubiquitin ligases regulates endocytosis of proteins involved in immune recognition," <i>J. Cell Biol.</i> 155(7):1265-1273, 2001   |                |
|                                 | O5                    | BONAME and STEVENSON, "MHC Class I Ubiquitination by a Viral PHD/LAP Finger Protein," <i>Immunity</i> 15:627-636, 2001  |                |
|                                 | O6                    | COSCOY and GANEM, "A viral protein that selectively downregulates ICAM-1 and B7-2 and modulates T cell costimulation," <i>J. Clin. Invest.</i> 107(12):1599-1606, 2001  |                |
|                                 | O7                    | GUERIN et al., "Myxoma Virus Leukemia-Associated Protein Is Responsible for Major Histocompatibility Complex Class I and Fas-CD95 Down-Regulation and Defines Scrapins, a New Group of Surface Cellular Receptor Abductor Proteins," <i>J. Virol.</i> 76(6):2912-1923, 2002 |                |
|                                 | O8                    | FRÜH et al., "Immune evasion by a novel family of viral PHD/LAP-finger proteins of gamma-2 herpesviruses and poxviruses," <i>Virus Research</i> 88:55-69, 2002  |                |
|                                 | O9                    | MCFADDEN and MURPHY, "Host-related immunomodulators encoded by poxviruses and herpesviruses," <i>Curr. Opin Microbiol.</i> 3:371-378, 2000  |                |



|                       |  |                    |
|-----------------------|--|--------------------|
| Examiner<br>Signature |  | Date<br>Considered |
|-----------------------|--|--------------------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformation with MPEP 609. Draw line through citation if not in conformation and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.